

heights, the Baptistry, with its gates, as Michelangelo called them, worthy of paradise; the tall and richly-decorated belfry of Giotto; the church of the Carmine, with the frescoes of Massaccio; those of Santa Maria Novella (in the language of the same great man), beautiful as a bride; of Santa Croce, second only in magnificence to the cathedral of St. Mark, and of San Spirito, another great monument of the genius of Brunelleschi; the numerous convents that rose within the walls of Florence, or were scattered immediately about them. From these the eye might turn to the trophies of a republican government that was rapidly giving way before the citizen-prince who now surveyed them: the Palazzo Vecchio, in which the signory of Florence held their councils, raised by the Guelph aristocracy, the exclusive but not tyrannous faction that long swayed the city; or the new and unfinished palace which Brunelleschi had designed for one of the Pitti family, before they fell, as others had already done, in the fruitless struggle against the house of Medici; itself destined to become the abode of the victorious race, and to perpetuate, by retaining its name, the revolutions that had raised them to power."

Moral Sanitary Economy. By HENRY M'CORMAC, M.D. Consulting Physician to the Belfast General Hospital, &c. Belfast: printed for private circulation, by Alexander Mayne. 1853.

THE readers of the *Builder* do not require to be told that anything written by our correspondent Dr. M'Cormac must be well worth perusal. The present little book is a most valuable concentration, not only of the author's own ideas, but of those of innumerable other writers (the *Builder*, of course, inclusive) whom he quotes. The object which Dr. M'Cormac had in view in the preparation of this work, so far as regards its size, was to condense all he had to say within as small a compass as possible, and for this purpose the whole has been several times rewritten—a labour which cannot but vastly enhance its value when published, as we believe it is to be, for behoof of the people at large. It constitutes a suggestive, terse, and improving little volume. The author has included moral as well as sanitary statistics and advices, because he found it impossible to divide them. "Men," he remarks, "are not miserable, diseased, and short-lived merely because they reside in uncleanly, wretched homes, but because they are untaught and untrained as respects things necessary to human dignity and human well-being." The work is divided into twelve sections, viz. Female Degradation, Employment, Education, Household Culture, Criminal Management, Physical Training, Clothing, Food, Drink, Air, Drainage, and Prevention of Disease.

"We are constantly anathematizing vice, ignorance, and improvidence," says the author in his preface, "but we also are confessedly to blame, in so far as, by means of proper culture and training, it might have been possible to prevent them. If Governments will not, then should municipalities make a sort of razzia on the vile recesses, unfit for creeping reptiles or wallowing swine, yet the only homes of tens of thousands in all our towns; reconstruct these wretched homes; clothe, instruct, and employ their inmates; above all, educate and train the young."

In reference to employment and the power of Governments, we may further quote a few suggestive sentences, written under head of "Employment," and immediately following the author's observations as to anonymous partnerships and working associations.

"It is only necessary that money should be the certificate, not the equivalent, of value. Mr. Duncan has proposed, that when Government took a vote for money they should issue some fifty millions of 11. notes, to be duly cancelled after being paid in as taxes. (*Liverpool Standard*, May 20. 1851.) Mr. Harvey, of Liverpool, mentions in his *Pamphlet*, how the States of Guernsey issued 4,000 11. notes, which were declared a legal tender, guaranteed by the whole property of the island, in order to repay the cost of a public market. When the market was finished, and the first year's tenancy had expired, 4001. in rent was handed lo. The treasurer then publicly cancelled 400 of the notes, so that at the end of ten years the debt was extinguished, while the market, which in fact had cost nothing, remained, paying 4001. annually to the state. The principle, which appears every way practicable, de-

serves the attention of publicists, money merchants, and the Legislature."

It is easy, of course, to say that such a principle might be liable to abuse; but could not such abuse be efficiently guarded against, whilst great good, both moral and physical—both educational and sanitary—might thus be rapidly conferred upon the industrial mass of the community?

Rational Arithmetic. By Mrs. G. R. PORTER. A new edition. Murray, Albemarle-street, London.

THIS useful little volume was originally published in a conversational form, but it has now been altered and adapted for the use of schools as well as for private instruction. Every care compatible with the nature of the subject has been taken to render it as—attractive shall we call it—to young and tender minds as possible.

Miscellaneous.

WELLINGTON'S SEPULCHRE.

Beneath the Dome the hero lies,
A genius great the Tomb supplies,
With civil power vast to raise
Peace and War to equal praise;
Striking the human mind with awe,
At talent scarcely seen before:
Resplendent glory's earthly home,
And Order's world from "Chaos" stone.
The soul and body here unite
With boundless good cosmopolite.
Now, when we think what Arthur won,
And see the work that Wren has done;
Wellington, worthy Wren's great dome,
And Wren quite worthy Arthur's tomb,
We seem as nothing here in space,
Or dwarfs creation to disgrace.
But, if we think a moment more,
Our hearts must thro' to inmost core,
With joy and pride almost divine,
And, man-like, say, "These works are mine:
I built the tower that makes me small,
Genius and strength performed it all;
And like a giant I lift the mound,
As mole the earth on meadow ground;
And greater prove myself to be,
Than these, my works, that lessened me.
A spark of Heaven's eternal light,
Gives to man his glorious might;
And when such works,—such deeds,—we scan,
We feel that God has come to Man;
And humbly say before his throne,
'All honour's due to Thee alone.'"

R. T. WERN.

BURSTING OF ANOTHER RESERVOIR.—A serious destruction of property was caused on Sunday in last week by the bursting of a reservoir connected with bleaching and dye-works, at Elton, near Bury. The reservoir was situated at the head of a narrow, and in some places rather deep, gorge, occupied throughout by a succession of works of different kinds, each with its small reservoir, or lodge, formed by throwing an embankment across the valley. For many years only one reservoir existed, at the Lower Croft works, where the accident occurred. Into this reservoir were conducted two or three small streamlets; but on two or three occasions the flood was so great during heavy rains, that fears were entertained lest the embankment should yield; and this led to the formation of the "upper lodge," the embankment of which has now burst. This second embankment was thrown across the valley from 150 to 200 yards above the first, so as to form a reservoir having a surface of seven or eight acres. The embankment was about 100 yards long and 33 feet high, in the centre of the valley. It originally contained 31,691 cubic yards of "filling," and 3,184 of "puddle," and the estimated capacity of the reservoir was 21,150,000 gallons. The gathering ground extended over some 370 acres. The works were completed in March 1845, at a cost of from 1,200l. to 1,500l. Several manufactories and buildings were injured before the torrent subsided, and altogether, in private and public property, it is estimated that the damage done will not be much under 30,000l. or 35,000l. It would be utterly impossible to convey an idea of the wreck and ruin presented by the whole valley, property having been floated down and left in the middle of fields, roads, and hedges, and lying in confused heaps everywhere. It is said to be a small picture of the

Holmfirth inundation over again, so far as the destruction of property was concerned, but fortunately no village was on the banks of the stream, and no lives were lost. As it was on Sunday, too, there was no one working in the mills,—a providential circumstance. A correspondent of a Manchester paper states that "Many persons have considered the reservoir in an unsafe condition, in consequence of water having for a long time oozed through the embankment. This impression was communicated to the proprietor, but he did not appear to consider the matter important, as he stated in reply, that the leakage would filter the water. Some time since, however, means were adopted to prevent the increase of the leakage by inserting small pipes into the embankment to carry off the water that escaped."

THE IRON TRADE.—Prices are still on the advance. Some great masters are said to name 117. a ton as their price for bars and rods. Hot-blast pigs made from mine are said to have been refused on offers of 57. a ton for them. The number of furnaces in blast in Durham and Northumberland is stated to be thirty; and there are seventeen building. The production of each furnace varies from 135 to 200 tons per week, according to the mixture of iron-ores used. The present price of pig-iron made at these works is about 37. 3s. 6d. per ton at Newcastle-on-Tyne, for ordinary brands; but the Weardeale is 10s. per ton higher.—Immense quantities of the ironstone recently being wrought on the north-east coast of Yorkshire, and embracing Easton Nab and Roseberry Topping, are being carried daily up the Stockton and Darlington Railway to Wotton-park Iron-works, and, further west, to Conisbrough Iron-works. The recent development of railway mineral traffic in South Durham, according to the *Shields Gazette*, is, for extent and profit, without a parallel in the kingdom.—Glasgow news of a recent date says:—"We have just closed a week of most unprecedented excitement in our pig-iron market, the price having advanced about 6s. per ton since this day se'nnight. The nominal quotation to-day is 65s. for m. n. warrants, at which considerable business has been done, the market closing with a very unsettled appearance."—The Portland Iron Company has been formed for working ironstone fields, secured by leases at moderate royalties, consisting of 5,000 acres, held under the Duke of Portland, the works being situate about two miles from Kilmarnock, and within twelve miles from the shipping port of Troon. The property contains the celebrated blackband ironstone, varying from 14 to 24 inches thick, extending over 2,000 acres. The remaining 3,000 acres contain large quantities of coal and ironstone, and probably blackband also, to prove which borings are being made; and it is expected these works contain a larger quantity of coal, ironstone, and fire-clay, of first-rate quality, than any other in the kingdom. The blast furnaces will turn out 30,000 tons of pig-iron per annum.

ELEMENTARY DRAWING SCHOOL AT CHESTER.—The Mechanics' Institution of Chester have resolved to grant the free use of their committee-room for two evenings in the week, for the use of an elementary drawing class, under the Government Department of Practical Art.

NEW INDEPENDENT CHAPEL AT CAMBERWELL-GREEN.—It having been deemed desirable to erect a new place of worship, with vestries and schoolrooms attached, a piece of freehold land, on the south side of Camberwell-green, was purchased for the purpose; and a design having been furnished by Messrs. Wilson and Co. of Bath, architects, a contract for the erection of the building was entered into with Mr. John Glenn, of the Liverpool-road, London, builder, by whom the works were commenced a short time since, and the foundation-stone was laid in course of last week. The chapel will be in the Gothic style of architecture, and will be ornamented in front with two decorated towers. The extreme length is about 110 feet, and breadth, 60 feet. The material is Kentish rag-stone, with quoins and dressings of Caen stone. In addition to the schools in the rear, the chapel will contain seats for 1,000 adults and 300 children.